

a channel forming region being formed between the source region and the drain region; and

E1 an impurity region including a second impurity having an opposite conductive type to the first impurity and being formed under the channel forming region and the source region, wherein a concentration of the second impurity in the channel forming region is from 1/100 to 1/10 of that in the impurity region.

29. (Third Amendment) A semiconductor device comprising a plurality of MOSFETs formed in a single crystal semiconductor substrate,

Sub Fa each of the plurality of MOSFETs comprising:

a source region and a drain region each including a first impurity;

a channel forming region being formed between the source region and the drain region;

E2 an impurity region including a second impurity having an opposite conductive type to the first impurity and being formed under the channel forming region and the source region;

a pair of LDD regions, wherein one of the pair of LDD regions is formed between the source region and the channel forming region while the other of the pair of LDD regions is formed between the channel forming region and the drain region,

wherein a concentration of the second impurity in the channel forming region is from 1/100 to 1/10 of that in the impurity region.

42. (Third Amendment) A semiconductor device comprising at least a CMOS circuit including an n-channel MOSFET and a p-channel MOSFET each being formed in a single crystal semiconductor substrate,

Sub F3
said n-channel MOSFET comprising:

a first source region and a first drain region each comprising a first n-type impurity;

a first channel forming region being formed between the first source region and the first drain region;

E3 a first impurity region including a first p-type impurity and being formed under the first channel forming region and the first source region;

said p-channel MOSFET comprising:

a second source region and a second drain region each comprising a second p-type impurity;

a second channel forming region being formed between the second source region and the second drain region;

a second impurity region including a second n-type impurity and being formed under the second channel forming region.

Please add the following new claims:

56 (New). An EL display device comprising:

Sub F4
a plurality of MOSFETs formed in a single crystal semiconductor substrate, each of the plurality of MOSFETs comprising:

a source region and a drain region each including a first impurity;

a channel forming region being formed between the source region and the drain region; and

an impurity region including a second impurity having an opposite conductive type to the first impurity and being formed under the channel forming region,

E4
wherein a concentration of the second impurity in the channel forming region is from 1/100 to 1/10 of that in the impurity region,

wherein the second impurity is introduced from a direction of the $\langle 110 \rangle$ axis with respect to the single crystal semiconductor substrate, so that the second impurity is introduced from a perpendicular direction to a plane having the smallest atomic density of the single crystal semiconductor substrate,

wherein the concentration of the second impurity in the impurity region is in a range of 1×10^{18} to 1×10^{19} atoms/cm³,

wherein the concentration of the second impurity in the channel forming region is in a range of 1×10^{16} to 1×10^{17} atoms/cm³.

57 (New). An EL display device according to claim 56,

wherein the first n-type impurity is arsenic,
wherein the second n-type impurity is phosphorus, and
wherein each of the first and second p-type impurity is boron.

24 58 (New). An EL display device according to claim 56, wherein the EL display device is incorporated into at least one selected from the group consisting of a cellular phone, a personal handy phone system and a portable computer.

59 (New). An EL display device according to claim 56, wherein the impurity region is formed at a depth in a range of 20 to 150 nm from a surface of the single crystal semiconductor substrate.

REMARKS

Applicants will address each of the Examiner's objections and rejection in the order in which they appear in the Office Action.

Claim Objections

Claims 1, 3, 15, 18, 21, 24, 27-34 and 42-48 are objected to for informalities. In particular, The Examiner objects to the recited $\langle 110 \rangle$ direction and the recited diagonal direction of the second impurity injection.